

DESCRIPTIONS OF FOUR NEW SPECIES OF
NEW SOUTH WALES PLANTS.

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EUGENIA BRACHYANDRA, n.sp.

A tall tree glabrous in all its parts, the young branches quadrangular, with four raised lines or short wings running down the branches from the petioles. Leaves thinly coriaceous, lanceolate, acuminate, the margins slightly recurved, about 4-5 inches long and $1\frac{1}{2}$ inches broad, dark green above but not shining, paler underneath and the midrib on the underside frequently of a pinkish colour, transversely veined, the pinnate veins impressed on the upper side, forming corresponding elevations on the under side; oil-glands quite concealed in the dried leaves but distinctly though faintly visible in fresh specimens, especially on the lower part of the leaves. Petioles usually under $\frac{1}{4}$ inch long. Flowers sessile on the branches of a compact terminal trichotomous panicle much shorter than the leaves. Calyx broadly campanulate, about $1\frac{1}{2}$ lines diameter, shortly produced above the ovary, 5- or frequently 6-lobed, the lobes broad and scarcely $\frac{1}{2}$ line long. Petals as many as the calyx-lobes and scarcely exceeding them in length; very deciduous. Stamens not exceeding the petals in length, having small versatile anthers with almost globular cells. Ovarium 2-celled, with two collateral ovules in each cell. Fruit globular, succulent, about $\frac{3}{4}$ to 1 inch diameter, reddish when ripe, marked round the top with the scar of the calyx-limb.

Ballina, N.S.W. (W. Baeuerlen, April, 1893); Tintenbar, N.S.W. (W. Baeuerlen, Dec., 1893), extending to Queensland (north coast line). In northern New South Wales known as Red Apple.

Mr. F. M. Bailey, who kindly forwarded fruiting specimens from the "North-coast line, Queensland," quite identical with our N.S. Wales specimens, expresses the opinion that it may be identical with *E. hemilampra*, F.v.M., but as the result of the examination of the abundant flowering specimens at our disposal, we do not acquiesce in that view.

Baron von Mueller described *E. hemilampra* in *Fragm.* ix. 145, from specimens without flowers or fruits, the description being so imperfect that we need not refer to it any further. Mr. Bailey adopted Baron von Mueller's name for a Johnstone River *Eugenia* fully described by him in his Botany Bulletin, No. ix. (Sept., 1894), from which our New South Wales plant differs in the following essential points:—

<i>E. hemilampra</i> , from Johnstone River (as described by Bailey).	<i>E. brachyandra</i> , n.sp., from N.S. Wales.
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Leaves broad-lanceolate, with distinctly visible oil-dots, the upper surface shining, dotted with small pits, and with raised veins.

Leaves lanceolate, the oil-dots quite invisible in dried leaves, the upper surface not shining, smooth, with impressed veins.

Panicle loose and many-flowered.

Panicle very short and compact.

Petals falling off in a calyptra.

Petals very deciduous, not cohering.

Stamens twice as long as the petals, with flexuose filaments.

Stamens not exceeding the petals in length, the filaments not flexuose.

Eugenia brachyandra has been long under cultivation in the Botanic Gardens, Sydney, and was erroneously described from fruiting specimens by Mr. C. Moore as *Memecylon australe* (*Handbook of the Flora of New South Wales*, p. 208), he having been misled by the apparent absence of oil-glands in the leaves and the Memecylon-like fruits.

Bentham's note in Vol. iii. p. 294 of the *Flora Australiensis*: "Specimens of a tree from the Clarence and Richmond Rivers in

fruit only may possibly belong to a *Memecylon*" (then follows a short description), refers in all probability to *E. brachyandra*.

VERTICORDIA DARWINIOIDES, n.sp.

An erect bushy shrub quite glabrous. Leaves opposite, linear-falcate, thick but scarcely triquetrous, about 2 lines long, obtuse, but with a fine often oblique point. Flowers terminal or in the upper axils, usually in pairs on a slender common peduncle 1 to about 2 lines in length; floral-leaves completely resembling the stem-leaves; bracteoles large, thin and scarious, yellowish, enclosing the flower-buds, and long persistent. Calyx-tube cylindrical, 5-ribbed, smooth, about 3 lines long, the lobes deeply divided into 5-8 narrow filamentous segments about twice as long as the petals. Petals ovate, about 1 line long, entire. Stamens short, with nearly globular anthers, but in the few flowers available for examination the anthers and upper parts of the filaments were nearly all eaten off by insects, so that stamens and staminodia could not be clearly distinguished. Style slender, much exerted, bearded towards the end. Ovules 2 only in the ovaria examined.

Near Dubbo (J. L. Boorman, December, 1897).

The chiefly W. Australian genus *Verticordia* has been hitherto only represented in North Australia and Queensland by *V. Cunninghamii*, Schauer, and in S. Australia by *V. Wilhelmi*, F.v.M., to which we can now add *V. darwinioides* as the only representative in N.S. Wales. It is allied to the South Australian species, with which it has the narrow calyx-tube in common, but it forms a still closer connecting link between *Darwinia* and *Verticordia* than *V. Wilhelmi* does. The general appearance of the plant is quite that of a *Darwinia*, an effect chiefly produced by the large persistent bracteoles, so uncommon in *Verticordia*, and by the comparatively inconspicuous fringes of the calyx-lobes, generally so very conspicuous in *Verticordia*; but since we wish to adhere to the generic characters laid down by Bentham and Hooker in their *Genera Plantarum*, we have no choice but to place it under *Verticordia*, in spite of its close relationship to



Darwinia. The material procured by Mr. Boorman is unfortunately scant, on account of the late season in which it was collected, so that we have only a few imperfect flowers for examination, but we hope to procure better material next season, which may necessitate some slight modification in the above description.

RULINGIA PROCUMBENS, n.sp.

A prostrate shrub with slender stems trailing closely along the ground, more or less stellate-hairy all over. Leaves on petioles generally $\frac{1}{4}$ to nearly $\frac{1}{2}$ inch in length, from ovate to ovate-lanceolate in general outline, very obtuse, 1-1 $\frac{1}{2}$ inches long and up to an inch broad, deeply and irregularly crenate or almost lobed, oblique, one side of the midrib usually larger than the other, sprinkled with stellate hairs on the upper side, densely white tomentose underneath also with stellate hairs. Flowers in small leaf-opposed cymes generally not much longer than the petioles. Buds very obtuse, scarcely angular. Calyx tomentose, spreading to about 3 lines diameter. Petals with a rather broad lamina, as long as the calyx or slightly exceeding its lobes. Staminodia connivent, glabrous like the petals but shorter. Capsule stellate-tomentose and covered with very short stellate-hairy setæ.

Described in the *Handbook of the Flora of New South Wales*, p. 64, by Moore and Betche, as *Commersonia Gaudichaudi*, Gay. Near Dubbo (E. Betche, Nov., 1887).

RULINGIA PROSTRATA, n.sp.

A prostrate shrub forming dense mats or patches several feet across and only a few inches thick, sparingly sprinkled with long stellate hairs. Leaves on slender petioles of half an inch to occasionally 1 inch in length and even longer, ovate-lanceolate, obtuse, from under 1 to 2 inches long, deeply and irregularly crenate and lobed, almost flat in the larger leaves but with distinctly recurved margins in the smaller ones; nearly glabrous on the upper side, paler green and sparingly stellate-hairy underneath; veins depressed; stipules long persistent. Flowers in

small leaf-opposed cymes, generally shorter than the petioles at the time of flowering, but the fruits often on long peduncles. Buds small, obtuse, somewhat angular. Calyx tomentose, spreading to about 3 lines diameter. Petals with a narrow linear lamina shorter than the calyx-lobes. Staminodia spreading in the flowers examined, tomentose. Capsule densely covered with rather long stellate-hairy setæ; dehiscence septicidal.

Barber's Creek (between Moss Vale and Goulburn, J. H. Maiden, January, 1898).

The two *Rulingias* described above are both allied to the W. Australian *R. parviflora*, Endl., and to our eastern *R. hermanniæfolia*, Steetz, with which they have the prostrate habit in common. The species from Dubbo is sharply distinguished from both by the glabrous staminodia, and in addition from *R. hermanniæfolia* by the broader and longer ligula of the petals, and the foliage. The species from Barber's Creek differs from *R. hermanniæfolia* only in the shape, size and consistence of the leaves, and in the longer setæ of the capsules; the characters of the flowers are quite identical in both species. Bentham's remark under *R. parviflora* in the *Flora Australiensis* (Vol. i. p. 240) "it is much more nearly allied in character to the eastern *R. hermanniæfolia*, from which the chief differences consist in habit and foliage," applies as much to *R. prostrata*, in fact to all three species, *R. parviflora*, *hermanniæfolia*, and *prostrata*. The typical *R. hermanniæfolia* from the coast, between Port Jackson and Botany Bay, has with its small almost coriaceous leaves, a very different appearance from *R. prostrata*, yet when in the future the geographical range and the forms of this species are better ascertained it may be expedient to include it amongst the varieties of *R. hermanniæfolia*.